VI. On some recent additions to the list of South African butterflies. By Roland Trimen, F.R.S., F.L.S., Curator of the South African Museum, Cape Town.

[Read February 4th, 1891.]

The butterflies to which I here direct notice are all natives of Eastern South Africa, and three of them appear to be undescribed, vid., Pseudonympha pætula, Lycænesthes neglecta, and Zeritis Oreas. The last-named species is a very distinct form, isolated from its known congeners by the peculiar characters indicated. Of the three species already known, one, Acræa Admatha, Hewits., is a native of tropical Western Africa; while the remaining two, Acræa Obeira, Hewits., and Lycæna Antanossa, Mabille, inhabit Madagascar. Both the Acrææ present some divergence from the typical forms.

Family NYMPHALIDÆ. Subfamily SATYRINÆ.

Genus Pseudonympha, Wallengren.

Pseudonympha pætula, n. sp.

Exp. al. (3) 1 in.  $6\frac{1}{2}$ —9 lin.; (2) 1 in.  $9\frac{1}{2}$  lin. Nearly allied to P. Trimenii, Butl.\*

3. Rather dark brown; fore wing with an undivided large deep fulvous patch occupying all central area, hind wing with a small discal ill-defined one; bipupillate subapical black occllus of fore wing large, markedly oblique. Fore wing: Fulvous patch extending from near base as far as subapical ocellus (which it almost half encircles), filling nearly all discoidal cell, and descending a little below part of median nervure and its first nervule; external border of patch encroaching more or less on dull yellowish grey ring of ocellus, but not sharply defined below the ocellus; upper border of patch rather sharply indented by ground colour at extremity of discoidal cell; between end of cell and ocellus an irregular dark brown thin transverse streak which usually becomes obsolescent

<sup>\*</sup> Cat. Sat. Brit. Mus., p. 94, n. 6 (1868).

or obsolete inferiorly, about where it takes a strong outward deflection between 2nd and 1st median nervures; ocellus varying from large to very large, elongated obliquely, so that the lower of its two conspicuous white pupils is wholly beyond the upper; its investing ring usually rather obscure; a submarginal dark brown or fuscous streak (touched by outermost part of ring of ocellus), and also a similar hind-marginal terminal streak. Hind wing: Small fulvous patch beyond middle extending above 3rd and below 2nd median nervules, and bounded externally by a submarginal fuscous streak like that in fore wing; a little before this streak, between 2nd subcostal and 1st median nervules, a series of four small black ocelli, distinctly unipupillate with white, but very indistinctly ringed with dull yellowish grey; of these ocelli the uppermost is much or very much smaller than the others, and in one specimen it is wanting altogether; a terminal hind-marginal fuscous streak as in fore wing. Under side.—Paler throughout; neuration throughout hind wing and at apex of fore wing rather conspicuously whitish. Fore wing: Rufous, brighter in tint; ring of ocellus better defined; apex irrorated with whitish, which also forms a line immediately before submarginal blackish streak (between that streak and ocellus); before middle, costa and both sides of inflated costal nervure edged with whitish. Hind wing: Of the three transverse blackish streaks, the subbasal and median ones are irregular, angulated, and strongly marked, the inner edge of the former and the outer edge of the latter being bounded by whitish clouding more or less freckled with short dark brown lineolæ, and the submarginal one is slender, slightly sinuated, and bounded inwardly throughout and outwardly in its inferior part by narrow whitish clouding; basal and inner-marginal areas more or less clouded with whitish, and more closely freckled with dark brown lineolæ than rest of wing; edge of costa near base, and a line from base to hind margin midway between submedian nervure and median nervure and its first nervule, whitish; a white fringe of hairs along inner margin and at anal angle; row of ocelli as on upper side, but consisting of five instead of four, the additional ocellus being between the subcostal nervules.

2. Like 3, but larger and rather paler.

(Described from five males and one female.)

This form is readily recognised by the large size and singularly oblique elongation of the ocellus of the fore wing. It further differs from its near ally, *P. Trimenii*, in the following features, *vid.*, 10, large size; 20, one large continuous field of rufous in the fore wings instead

of two small rather widely separated patches; 30, better developed rufous patch and more distinct ocelli in the hind wings; and, on the under side of the hind wings, 40, absence of the deeply bifurcate longitudinal whitish streak in the discoidal cell; 50, much stronger dark brown (almost blackish) freckling; 60, different direction and angulation of median transverse dark streak, which

is also more strongly developed.

The South African Museum acquired a solitary 3 of this butterfly in 1879; it was taken in the Eastern Transvaal (Lydenburg District) by Mr. T. Ayres. I did not think it advisable to found a new species on this specimen, as it might have been merely an aberration of P. Trimenii; but, in 1889, Mr. J. M. Hutchinson sent several examples (including one ?) of the same form, which he had taken, in August and September, on the Natal side of the Drakensberg, at an elevation of about 7000 ft. He has since informed me that it was numerous at that height, flying rather swiftly and continuously for a Satyride; but that it was out for a very short time, not appearing after the 15th September, and was not noticed at any lower station.

Hab. Natal: Drakensberg (alt. 7000 ft.). Transvaal: Lydenberg District.

Subfamily ACREINÆ.
Genus ACRŒA, Fab.
Acræa Admatha, Hewits.

Acræa Admatha, Hewits., Exot. Butt., iii., p. 15, pl. 8 (Acræa, iii.), ff. 16, 17 (1865). [3.]

This butterfly belongs to the *Horta* group, but is distinguished from that species and its allies by the broad dark border of the hind wings, completely enclosing six

large round spots of the ground colour.

The type figured by Hewitson is noted as a native of Old Calabar, and other examples in the Hewitson Collection are recorded from Angola; while specimens from Sierra Leone and the Gold Coast are in the South African Museum and my own cabinet.

Not until 1888 was I aware that this species occurred in extra-tropical South Africa. A single \$\mathbf{2}\$ example, taken at Etshowe, Zululand, in January, 1887, was then presented to me by Capt. A. M. Goodrich, of the Inniskilling Fusiliers. Recently I have received, from Major J. S. D'Aguilar, a 3 and a 2 taken by him at the same station in 1886; and lastly, Mr. Cecil N. Barker has presented to the Museum a 2 taken by him at Malvern,

near D'Urban, Natal, on the 14th April, 1890.

These southern examples differ from the typical West African specimens in the form of the black spots of the hind wings, which is not nearly so rounded; the discal series of those spots is also less irregular and more continuous (the 3rd and 4th spots being nearer to the extremity of the discoidal cell), while the subbasal spot in the cell is wanting, and that immediately below it is crescentic. In the southern 3 example, moreover, the dull brick-red of the basi-inner-marginal area of the fore wings is superiorly more extended, covering the lower half of the discoidal cell, and the discal series of indistinct fuscous spots is obsolete. This discal series of fore-wing spots is, however, present in all the three southern females.

Until more South African specimens are known, it must remain uncertain whether the differences pointed out are constant. In the females the red of the  $\mathcal S$  is wanting, being replaced by a dull creamy or brownish creamy tint.

Hab. Zululand: Etshowe. Natal: Malvern, near D'Urban.

Acrœa Obeira, Hewits.

Acræa Obeira, Hewits., Proc. Zool. Soc. Lond., 1863, p. 65.

A. Piva, Guén., Vinson Voy. Madag., Ann., p. 34.

A. Obeira, Mab., Grandid. Hist. Phys., &c., Madag., Lep., i., p. 95, and Atl., pl. 9 A, f. 7, and pl. 10, ff. 5 and 6 (1886—87).

This is another species of the *Horta* group, and has hitherto been known from Madagascar only. Its inclusion in the South African fauna is due to my valued correspondents, Major J. S. D'Aguilar and Mr. Cecil N. Barker, the former having sent me a \$\mathcal{2}\$ captured at Esthowe in Zululand, in 1886, and the latter a \$\mathcal{2}\$ taken at Malvern, near D'Urban, on the 14th April, 1890.

I give the following descriptions of these specimens, vid.:—

2. Exp. al. 2 in. 2-3 lin.

Transparent, with a dull fuscous apical and hind-marginal border in both wings; hind wing, and (more faintly) basal half of fore wing as far as extremity of discoidal cell and obliquely to posterior angle, very dull brick-red; fore wing without markings, hind wing with numerous black spots. Hind wing: A spot in cell close to base, and another about or a little beyond middle of cell; 5 subbasal spots—one costal, and four between median nervure and inner margin; two small spots, obliquely placed, marking extremity of discoidal cell; a discal superiorly strongly outward-curving series of 8 spots from costa to inner margin, the last three being considerably larger than the rest (the 3rd, 4th, and 5th spots are obsolete in the Zululand specimen); fuscous hind-marginal border ill-defined on its inner edge, the nervules and internervular lines crossing it are darker. Under SIDE.—Much duller and paler; red in fore wing very faint, in hind wing wanting, replaced by creamy (in Natal example tinged with dull reddish before discal series of spots). Hind wing: An additional black spot at base, on costa.

These South African specimens agree very well with Hewitson's brief description (loc. cit.) of the Madagascar type. Hewitson does not mention any small red internervular hind-marginal spots in the hind wings, nor is there any trace of these in the specimens just described; but Guenée, in his description (op. cit.) of A. Piva, mentions them, and Mabille (op. cit.) both describes and figures them. As regards these spots, however, it should be noted that they are evidently variable alike in colour, distinctness, and number; the figures in Grandidier's work giving six rather bright and large ones in pl. 9 A, f. 7; six rather small, faint, and inconspicuous ones in pl. 10, f. 5; and only three (between 3rd median nervule and submedian nervure) in pl. 10, f. 6.

Hab. Zululand: Etshowe. Natal: Malvern, near D'Urban. Madagascar: North and East (Mabille).

Family LYCÆNIDÆ.
Genus LYCÆNA, Fab.
Lycæna Antanossa, Mab.

Lycæna Antanossa, Mab., Bull. Soc. Ent. France, 1877, p. 101; and in Grandid., Hist. Phys. Madag., Lep., i., p. 221, and Atlas, pl. 28, ff. 11—14 (1885—87).

This Lycana is one of the Lysimon group, and so closely allied to the Indian L. Otis (Fab.)—as recognised by Butler,\* De Nicéville,† and other workers at Oriental Lepidoptera—that I have some hesitation in awarding it species-rank. The markings of the under side agree with those of Otis (Singalese specimens), but its ground colour is paler and less brownish. It is the singular silvery bluish of the upper side that best distinguishes Antanossa, resembling as it does the tint exhibited by the males of the European L. Damon, W. V., and Corydon, Scop., though less brilliant; for in Otis the blue is distinctly violaceous, as in Lysimon. The hindmarginal series of dark and whitish marks on the upper side of the hind wings is also a distinctive feature; and in size (exp. al. 3  $11\frac{1}{2}$ —1 in.  $0\frac{1}{2}$  lin., 2 1 in.  $0\frac{1}{2}$  lin.) the insect is notably larger than Otis.

As long ago as March, 1867, I met with two examples of this butterfly in Natal, and recorded at the time its apparent distinctness from L.Kuysna, mihi (=Lysimon, Hübn.); but it was not until quite recently that Major D'Aguilar recalled my attention to the form by forwarding a pair from Maritzburg, and representing the apparently constant characters (notably the want on the under side of the spot in the discoidal cell of the fore wings) which separated it from Lysimon. Other specimens from Natal have since reached me, vid.: one from Mr. J. M. Hutchinson, taken at Estcourt, Weenen District, and three from Mr. A. D. Millar, taken near

D'Urban.

The 2 differs from the 3 in being rather darker, and in the restriction of the silvery bluish of the upper side, which in one example is reduced to some indistinct scaling in basal half of fore wings, and is absent in the hind wings.

I had described this butterfly as a distinct form, not identifying it with *Antanossa*, Mab., until carefully comparing it with the excellent figures above cited.

Major D'Aguilar writes that he had taken a good many specimens in the Maritzburg District, but on the coast Mr. Millar has noticed but few. My own captures

<sup>\*</sup> Cat. Fab. Diurn. Lep., p. 169, pl. ii., ff. 8, 11 (1869).

<sup>†</sup> Butt. India, &c., iii., p. 119, pl. xxvi., f. 175 (1890).

were made respectively at Udland's Mission Station and Mapumulo, in the Umooti and Lower Tugela Districts. M. Mabille states that it appears to be rare in Madagascar.

Hab. Natal: coast and inland districts. Madagascar.

Genus Lycenesthes, Moore.

Lycænesthes neglecta, n. sp.

Allied to L. Liodes, Hewits.

3. Exp. al. 1 in.  $0\frac{1}{2}$ — $1\frac{1}{2}$  lin.

Cupreous violaceous; a common hind-marginal linear black edging; cilia greyish white in fore wing, white in hind wing. Hind wing: In three of five examples a small indistinct hindmarginal fuscous spot between 1st and 2nd median nervules. Under side.—Brownish grey, with a slight ochreous tinge; in each wing a double darker streak (enclosing one of the ground colour) at extremity of discoidal cell, the whole marking being white-edged on both sides; a discal fascia, very strongly incurved inferiorly, composed of confluent spots like marking at end of cell; two submarginal rows of whitish lunules enclosing spots slightly darker than ground-colour; and a hind-marginal terminal black line, bounded inwardly by a very indistinct whitish edging. Fore wing: No marking before extremity of cell; discal fascia more irregular than in Liodes, the 4th and 5th spots being three-fourths before the superior ones, and the 6th three-fourths before the 5th (so as to be quite as near base as terminal disco-cellular spot). Hind wing: Discal fascia not so sharply biangulated inferiorly as in Liodes, its first spot different from the rest, fuscous, and in a complete white ring: subcostal spot nearer base also similarly different from that in Liodes, being quite round and black in a white ring; of three hind-marginal black spots near anal angle, the 1st and 3rd are always distinct, dusted with greenish silvery, and edged interiorly by an orange lunule; but the 2nd is indistinct, without orange lunule, and in three of five examples is obsolete.

The colour of the upper side, the browner (more ochraceous) tint of the under side, and the differences of marking italicised in the above description, distinguish this species from its near ally, L. Liodes; the under side markings, indeed, approximate it to the larger L. Sylvanus (in which, however, the hind wing has three subbasal white-ringed spots instead of one only).

I took an example of this butterfly in Natal in 1867, and in 1871 received another, captured at D'Urban by the late Mr. M. J. McKen. I regarded these as a probable "sport" of Liodes; but both Major D'Aguilar and Mr. C. N. Barker have recently (1889—90) sent me other examples, taken respectively at Maritzburg and Malvern, and pointed out their distinctness from the species in question; and this additional material has convinced me that the form is entitled to recognition as a species. Mr. Barker's two specimens were taken respectively on 19th January and 3rd April, 1890, the former "on Mimosa flowers." The female is still unknown to me.

Hab. Natal: D'Urban, Malvern (near D'Urban), and Maritzburg.

## Genus Zeritis, Boisd. Zeritis Oreas, n. sp.

Not nearly allied to any known species, but as regards the upper side nearer to the Zeuxo group.

Exp. al. (♂) 11 lin.; (♀) 1 in. 1 lin.

3. Submetallic golden orange, with black spots and hindmarginal border: cilia long, black, with conspicuous white interruptions at extremity of nervules. Fore wing: Base paler on costa; two small spots before middle-one in discoidal cell, the other just below origin of 1st median nervule; a subreniform terminal disco-cellular spot; above and a little beyond last-named spot, a much smaller one, close to costa; a discal row of six rather large spots, irregular by the projection of the 3rd and 5th beyond the rest,—the 6th (below 1st median nervule) in one example divided longitudinally; costa narrowly edged with black from a little before extremity of cell to apex; hind-marginal border rather broad, especially at apex, and narrowing very gradually to posterior angle. Hind wing: Costal border rather broadly black; base slightly dusky; inner-marginal groove wholly dusky grey; between 1st subcostal and 1st median nervules, a discal row of 5 spots, of which the 2nd and 4th are smaller and slightly before the rest; hind-marginal border broad apically and as far as 3rd median nervule, but thence very narrow to anal angle, sharply indented throughout (but more deeply in narrow inferior portion) by the ground colour on nervules; anal angle with rather an acute projection. Under side.—Hind wing and apex of fore wing pale dull ochreous yellow, varied with black spots and shining-almost

silvery-white liture. Fore wing: Dull pale orange-vellow: black spots as on upper side, but the subbasal one below 1st median nervule expanded into a longitudinal bar from base; an additional small round spot in cell close to base, and another (more elongate) on costa above and a little before terminal disco-cellular spot; costa bordered with pale dull ochreous vellow; a regular submarginal series of six large black spots, of which the upper three are sagittiform (and the 4th subsagittiform) and bounded externally by >-shaped lituræ, shining white next spots but pale yellowish externally; extremities of these lituræ convergent at white nervular interruptions of fuscous cilia: a hind-marginal series of minute black spots, succeeded by a pre-ciliary black line interrupted on nervules; two small costal spots and first two spots of discal series bounded externally (the upper of the two latter spots also bounded internally) by a longitudinal white mark. Hind wing: Discal series consisting of 8 black spots slightly tinged with purplish ferruginous; from near base to discal spots run three longitudinal shining white stripes, vid.: between costal and subcostal nervures, -through discoidal cell,-and between median and submedian nervures; these stripes are broken by the following purplish black spots, vid.; the superior one by two (basal and median), the middle one by two (median and premedian), the lower one by one (median); 1st and 2nd spots of discal row bounded externally (the 2nd also internally) by elongated shining white marks; the lastnamed mark forms the commencement of a regular hind-marginal series of 7 >-shaped lituræ, like those in apical portion of fore wing, but longer, more acute, and bounded internally not by separate black spots, but by a continuous fuscous streak (diffuse inwardly) throughout; cilia as in fore wing, but the dark portion mixed with ochreous yellow; a hind-marginal series of black spots (rather larger and more diffuse than in fore wing), and a thin black pre-ciliary line.

Q. Larger, paler, and duller, with less of submetallic gloss; markings as in 3. Hind wing: Lower portion of basal area before discal spots obscurer; apical portion of hind-marginal border narrower. Under Side.—Paler and duller.

This very distinct species is not nearly related to any South African congener. The upper side much resembles that of *Chrysophanus Orus* (Cram.), and also that of *Zeritis Zohra*, Donzel,\* from North Africa; as regards the South African species of *Zeritis*, this surface of the wings is on the whole (though more strongly spotted,

<sup>\*</sup> Ann. Soc. Ent. de France, 2me Sér., v., pl. 8, f. 5 (1847). TRANS. ENT. SOC. LOND. 1891.—PART I. (MARCH.) N

and with darker basal areas) more like that of the rare Z. Chrysantas, Trim. A singular difference between the two forms is exhibited in the cilia, the conspicuous white interruptions of which in Oreas are at the extremity of the nervules, while in Chrysantas—as well as in all others of the genus known to me in which this character occurs—they are inter-nervular. structural features of the antennæ and palpi, and in the shape of the wings, Oreas also agrees with Chrysantas. The under side is, as regards the hind wings, quite unique in pattern and marking, though the >-shaped hind-marginal lituræ which it (in common with the apex of the fore wings) presents remind one of the similar (but reversed and much brighter silvery) markings in the otherwise wholly different Z. Wallengrenii, Trim. The total absence of any steely or brassy centres in the black spots of both wings is further a highly peculiar feature in the under side of Z. Oreas.

The discovery of this notable addition to the genus Zeritis is due to Mr. J. M. Hutchinson, who thus describes how he met with the insect at an elevation of about 7000 ft. in the Drakensberg Mountains, Natal, vid.:—"The first specimen I saw I failed to capture, owing to my net becoming disjointed; and for a week or ten days subsequently I searched for another without success. But hurrying home to my cave from a thunderstorm, while a heavy wind was blowing, one of the new Zeritis was blown against my leg, and, lighting there, was soon boxed. In less than five minutes I had taken eight, including a pair in copulâ. The insect was very local, not occurring over more than two or three acres of ground. Its flight is near the ground, but very rapid and very suddenly interrupted. Unless one rose,—when five or six others would join in the flight,—they sat very close, and even sweeping the net over them would not make them rise. I took eighteen specimens."

Hab. Natal: Drakensberg (alt. 7000 ft.).